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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,311	03/18/2004	Shawn D. Rogers	10599/131	5776
7590 11/27/2007				
Brinks Hofer Gilson & Lione				
P.O. Box 10395				
Chicago, IL 60610				
		EXAMINER		
		NGUYEN, HOA CAO		
		ART UNIT		PAPER NUMBER
		2841		
		MAIL DATE		DELIVERY MODE
		11/27/2007		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No.		Applicant(s)	
	10/803,311		ROGERS ET AL.	
	Examiner		Art Unit	
	Hoa C. Nguyen		2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 2, 4-7 and 11-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed on 9/10/07 has been entered.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (US 20020023342).

**Regarding claim 1**, as shown in figure 1, Nakamura discloses a multilayer board 1 (multi-chip module, par.56) comprising:

(a) a surface area 2X (main surface, par.56, figure 1) where an electrical device 10 (semiconductor chip, par.56) is mountable; and

(b) an array of capacitive elements 17/18 (plurality of chip capacitors, par.56) at least partially surrounding the electrical device (left, right, and far top side of the chip 10),

(c) wherein the capacitive elements of the array are disposed adjacent to two adjoining sides (left and the far top side of board 1) of the electrical device 10.

**Regarding claim 3**, as clearly shown in figure 1, Nakamura discloses the capacitive elements 17/18 comprise at least one of capacitors (or conductive patches inherently formed in within each capacitor).

Examiner remarks: Applicants should be noted that all capacitive elements including discrete capacitors (chip capacitor for example) are formed by at least two conductive layers namely patches, pads, or electrodes sandwiched at least a layer of dielectric material in between.

**Regarding claim 8**, Nakamura discloses a characteristic of the capacitive elements in the array changes (at least with size of the capacitor) with a distance from the electrical device (capacitor 17 is different from capacitor 18, as shown in the figure, and both are in different distance from the electrical device).

**Regarding claims 9 and 10**, as Nakamura discloses at least two capacitor sizes, capacitor 18 is larger than capacitor 17), therefore it is inherently that the conductive plates of the capacitor (conductive layers - patches, pads, or electrodes, see claim 3 above) are also changed in size and effectively to the shape of the plates (patches).

#### ***Response to Arguments***

4. Applicant's arguments filed 9/10/07 have been fully considered but they are not persuasive.

(a) Remarks, page 11: The argument is center about the prior reference art, Davidson.

Davidson does not disclose the newly added limitation, the capacitive elements of the array are disposed adjacent to two adjoining sides of the electrical device. Therefore, the Examiner withdraws the reference.

(b) Remarks, page 12: The argument is centered about the prior reference art Nakamura that does not disclose an array of capacitive elements at least partially surrounding the electrical device, wherein the capacitive elements of the array are disposed adjacent to two adjoining sides of the electrical device.

In a broad interpretation regarding the 'side', the Examiner can broadly interpret the group of capacitive elements 17 mounted on the top area of the board 1 as surrounding one side of the electrical device (considering the left side adjoining the right side of the device). Thus, the left side, the right side, and the top side of the device each has capacitive elements mounted thereon.

#### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa C. Nguyen whose telephone number is 571-272-8293. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hoa C. Nguyen  
11/25/07



**Diego Gutierrez**  
Supervisory Patent Examiner  
Technology Center 2800